

Mr. Phil Fortney
Calcium Products
Division of Irving Materials, Inc.
6455 West County Road 600 South
Swayzee, IN 46986

Re: **053-12181**
Second Administrative Amendment to
FESOP 053-5552-00038

Dear Mr. Fortney,

Calcium Products was issued a FESOP on December 10, 1996 for a limestone pulverizing plant. After the review of a stack test report by the Office of Air Management (OAM), (from stack test performed on February 9, 2000), a few discrepancies were found in the issued FESOP permit. Upon further evaluation, the OAM has determined that pursuant to the provisions of 326 IAC 2-8-10 the permit is hereby administratively amended as follows:

In Section C.1, Emissions Limitations (Overall Source Limit), it is stated that emissions of any regulated pollutant from the entire source shall not exceed 99 tons per 365 day period. Therefore, condition D.1.2a was added to accurately reflect the PM-10 emission limit in a federally enforceable permit condition. Section A.2, Emission Units and Pollution Control Summary, and Section D.1 (facility description), were corrected to accurately reflect the number of stacks (ID Nos. 1 and 2).

SECTION A SOURCE SUMMARY

A.2 Emission Units and Pollution Control Summary

The stationary source consists of the following emission units and pollution control devices:

- (a) one (1) drum dryer ~~inside Building #4~~ with a maximum aggregate throughput of 80 tons per hour, equipped with one (1) natural gas fired aggregate dryer burner with a maximum rated capacity of 27 million (MM) Btu per hour. This equipment will be replaced by Item (f);
- (b) ~~two (2)~~ **one (1)** baghouse for controlling particulate matter (PM) emissions from the drum dryer ~~and all indoor activities in Building #4 as well as screening operations in Building #4A, exhausting at one (1) stack (ID NO. #1), and one (1) baghouse for controlling particulate matter (PM) emissions from all indoor activities as well as screening operations, exhausting at one (1) stack (ID NO. #2);~~
- (c) one (1) 5' x 10' 3-deck screen ~~in Building #4;~~
- (d) four (4) 4' x 8' screens ~~in Building #4A; and~~
- (e) one (1) 36" Gyradisc crusher ~~inside Building #4;~~
- (f) one (1) drum dryer ~~in Building #4~~ to replace the existing drum dryer (Item (a)) with a maximum aggregate throughput of 100 tons per hour, equipped with one (1) natural gas fired aggregate dryer burner with a maximum rated capacity of 50 million (MM) Btu per hour; and
- (g) one (1) enclosed bucket elevator ~~inside Building #4.~~

A.3 Insignificant Activities

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(20):

- (a) one (1) feed hopper located outdoor;
- (b) one (1) raw material feed hopper ~~inside Building #4~~;
- (c) one (1) outdoor feed conveyor;
- (d) one (1) outdoor transferring conveyor in product shipping area;
- (e) seven (7) transferring conveyors ~~inside Building #4~~;
- (f) three (3) transferring conveyors ~~inside Building #4A~~;
- (g) one (1) enclosed storage bin with a maximum capacity of 800 tons;
- (h) nine (9) enclosed storage bins each with a maximum capacity of 180 tons;
- (i) four (4) enclosed storage bins each with a maximum capacity of 400 tons;
- (j) one (1) enclosed surge bin inside with a maximum capacity of 100 tons ~~Building #4~~; and
- (k) paved roads with public access.

SECTION D.1 FACILITY OPERATION CONDITIONS

- (a) one (1) drum dryer ~~inside Building #4~~ with a maximum aggregate throughput of 80 tons per hour, equipped with one (1) natural gas fired aggregate dryer burner with a maximum rated capacity of 27 million (MM) Btu per hour. This equipment will be replaced by Item (f);
- (b) ~~two (2) one (1) baghouse for controlling particulate matter (PM) emissions from the drum dryer and all indoor activities in Building #4 as well as screening operations in Building #4A, exhausting at one (1) stack (ID NO. #1), and one (1) baghouse for controlling particulate matter (PM) emissions from all indoor activities as well as screening operations, exhausting at one (1) stack (ID NO. #2);~~
- (c) one (1) 5' x 10' 3-deck screen ~~in Building #4~~;
- (d) four (4) 4' x 8' screens ~~in Building #4A; and~~
- (e) one (1) 36" Gyradisc crusher ~~inside Building #4~~;
- (f) one (1) drum dryer ~~in Building #4~~ to replace the existing drum dryer (Item (a)) with a maximum aggregate throughput of 100 tons per hour, equipped with one (1) natural gas fired aggregate dryer burner with a maximum rated capacity of 50 million (MM) Btu per hour; and
- (g) one (1) enclosed bucket elevator ~~inside Building #4~~.

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3] [326 IAC 12] [40 CFR Part 60.90]

D.1.1 Particulate Matter

State: Pursuant to 326 IAC 6-3 (Process Operations), the particulate matter emissions from baghouse exhaust stack (ID No. #1) shall not exceed 22.6 pounds per hour.

Federal: That pursuant to 326 IAC 12, (40 CFR Part 60.672, Subpart OOO) "Standards of Performance for Nonmetallic Mineral Processing Plant", the particulate matter emissions from the 100 tons per hour limestone dryer (equipment Item (f)) and bucket elevator shall be limited to 0.05 grains per dry standard cubic foot (gr/dscf).

D.1.2 Opacity

Pursuant to 326 IAC 12,(40 CFR Part 60.672, Subpart OOO) "Standards of Performance for Nonmetallic Mineral Processing Plant", the particulate matter emissions from the 100 tons per hour limestone dryer (equipment Item (f)) and bucket elevator shall not discharge or cause the discharge into the atmosphere any gases which exhibit 7 percent opacity or greater.

D.1.2a Particulate Matter 10 Microns (PM-10) [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, particulate matter 10 microns emissions from the aggregate drying operation, exhaust stack (ID No. #1), shall not exceed 22.3 pounds per hour, including both filterable and condensable fractions. Compliance with this limit will satisfy 326 IAC 2-8-4. Therefore, the Part 70 rules (326 IAC 2-7) do not apply.

D.1.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for each facility.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.1.8 Particulate Matter

That pursuant to CP-053-3456, issued on April 18, 1994, The baghouses controlling particulate matter emissions shall be in operation at all times when the limestone pulverizing plant is in operation.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Linda Quigley, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (973) 575-2555, ext. 3284 or dial (800) 451-6027, press 0 and ask for 3-6878.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
Revised FESOP title page
Revised FESOP
LQ/EVP

cc: File - Grant County
U.S. EPA, Region V
Grant County Health Department
Air Compliance Section Inspector - Jim Thorpe
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michelle Boner

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP)
OFFICE OF AIR MANAGEMENT**

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 1-800-451-6027

**Calcium Products, Inc.
6455 West County Road 600 South
Swayzee, IN 46986**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the facilities listed in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 and contains the conditions and provisions specified in 326 IAC 2-8 and 40 CFR Part 70.6 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments) and IC 13-15 and IC 13-17 (prior to July 1, 1996, IC 13-1-1-4 and IC 13-7-10).

Operation Permit No.: F053-5552-00038	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: December 10, 1996
First Administrative Amendment No.: AAF053-8738 Pages Affected: 22	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: July 31, 1997
Second Administrative Amendment No.: AAF053-12181 Pages Affected: 4, 20, 21	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	

SECTION A SOURCE SUMMARY

A.1 General Information

The Permittee owns and operates a limestone pulverizing plant.

Responsible Official: Phil Fortney
Source Address: 6455 West County Road 600 South, Swayzee, Indiana 46986
Mailing Address: 6455 West County Road 600 South, Swayzee, Indiana 46986
SIC Code: 3274
County Location: Grant
County Status: Attainment for all criteria pollutants
Source Status: Synthetic Minor Source, FESOP Program

A.2 Emission Units and Pollution Control Summary

The stationary source consists of the following emission units and pollution control devices:

- (a) one (1) drum dryer with a maximum aggregate throughput of 80 tons per hour, equipped with one (1) natural gas fired aggregate dryer burner with a maximum rated capacity of 27 million (MM) Btu per hour. This equipment will be replaced by Item (f);
- (b) one (1) baghouse for controlling particulate matter (PM) emissions from the drum dryer, exhausting at one (1) stack (ID NO. #1), and one (1) baghouse for controlling particulate matter (PM) emissions from all indoor activities as well as screening operations, exhausting at one (1) stack (ID NO. #2);
- (c) one (1) 5' x 10' 3-deck screen;
- (d) four (4) 4' x 8' screens;
- (e) one (1) 36" Gyradisc crusher;
- (f) one (1) drum dryer to replace the existing drum dryer (Item (a)) with a maximum aggregate throughput of 100 tons per hour, equipped with one (1) natural gas fired aggregate dryer burner with a maximum rated capacity of 50 million (MM) Btu per hour; and
- (g) one (1) enclosed bucket elevator.

A.3 Insignificant Activities

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(20):

- (a) one (1) feed hopper located outdoor;
- (b) one (1) raw material feed hopper;
- (c) one (1) outdoor feed conveyor;
- (d) one (1) outdoor transferring conveyor in product shipping area;
- (e) seven (7) transferring conveyors;
- (f) three (3) transferring conveyors;
- (g) one (1) enclosed storage bin with a maximum capacity of 800 tons;
- (h) nine (9) enclosed storage bins each with a maximum capacity of 180 tons;
- (i) four (4) enclosed storage bins each with a maximum capacity of 400 tons;
- (j) one (1) enclosed surge bin inside with a maximum capacity of 100 tons; and
- (k) paved roads with public access.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) for a Federally Enforceable State Operating Permit (FESOP).

SECTION D.1 FACILITY OPERATION CONDITIONS

- (a) one (1) drum dryer with a maximum aggregate throughput of 80 tons per hour, equipped with one (1) natural gas fired aggregate dryer burner with a maximum rated capacity of 27 million (MM) Btu per hour. This equipment will be replaced by Item (f);
- (b) one (1) baghouse for controlling particulate matter (PM) emissions from the drum dryer, exhausting at one (1) stack (ID NO. #1), and one (1) baghouse for controlling particulate matter (PM) emissions from all indoor activities as well as screening operations, exhausting at one (1) stack (ID NO. #2);
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Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3] [326 IAC 12] [40 CFR Part 60.90]

D.1.1 Particulate Matter

State: Pursuant to 326 IAC 6-3 (Process Operations), the particulate matter emissions from baghouse exhaust stack (ID No. #1) shall not exceed 22.6 pounds per hour.

Federal: That pursuant to 326 IAC 12, (40 CFR Part 60.672, Subpart OOO) "Standards of Performance for Nonmetallic Mineral Processing Plant", the particulate matter emissions from the 100 tons per hour limestone dryer (equipment Item (f)) and bucket elevator shall be limited to 0.05 grains per dry standard cubic foot (gr/dscf).

D.1.2 Opacity

Pursuant to 326 IAC 12, (40 CFR Part 60.672, Subpart OOO) "Standards of Performance for Nonmetallic Mineral Processing Plant", the particulate matter emissions from the 100 tons per hour limestone dryer (equipment Item (f)) and bucket elevator shall not discharge or cause the discharge into the atmosphere any gases which exhibit 7 percent opacity or greater.

D.1.2a Particulate Matter 10 Microns (PM-10) [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, particulate matter 10 microns emissions from the aggregate drying operation, exhaust stack (ID No. #1), shall not exceed 22.3 pounds per hour, including both filterable and condensable fractions. Compliance with this limit will satisfy 326 IAC 2-8-4. Therefore, the Part 70 rules (326 IAC 2-7) do not apply.

D.1.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for each facility.

Testing Requirements [326 IAC 2-8-4(3)]

D.1.4 Particulate Matter

During the period between 36 months and 42 months after issuance of this permit, the Permittee shall perform PM and PM10 testing utilizing methods per 40 CFR Part 60 Appendix A, Method 5, 17, 40 CFR Part 51 Appendix M, Method 201, 201a, 202, as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. PM10 includes filterable and condensable PM10.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.1.5 Pressure Readings

The Permittee shall take readings of the total static pressure drop across the baghouse controlling the mixing and drying operation, at least once a per working shift when the mixing and drying process is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 4.0 and 9.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Condition C.12 - Pressure Gauge Specifications, be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.1.6 Daily Visible Emissions Notations

Daily visible emission notations of the conveyers, material transfers, aggregate storage piles, unpaved roads, and the mixing and drying operation stack exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processed operated continuously "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation specified condition prescribing visible emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.1.7 Broken Bag or Failure Detection

That in the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the units have been replaced.
- (b) Based upon the findings of the inspection, any additional corrective actions will be devised within eight (8) hours of discovery and will include a timetable for completion.

D.1.8 Particulate Matter

Pursuant to CP-053-3456, issued on April 18, 1994, the baghouses controlling particulate matter emissions shall be in operation at all times when the limestone pulverizing plant is in operation.

D.1.9 Preventive Inspections

The following inspections shall be performed when the mixer/dryer is operating in accordance with the Preventive Maintenance Plan prepared pursuant to Condition B.13:

Daily:

- (a) Baghouse inlet temperature and air flow rate;
- (b) Adequate dust removal from hoppers;
- (c) Compressed air supply;